

Appl. No. 10/687,116
Amendment dated April 8, 2005
Reply to Office Action of January 11, 2005

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REMARKS

By the present Amendment, Claims 1-13 have been cancelled. New claim 18 is a method claim that features the limitations of claims 1 and 6. New claims 19-29 have also been added. Claims 14-17 are amended. Upon entry of the present Amendment, all pending will be method claims.

Figure 1 was objected to for failing to show the scale on the absorption axis. Applicants respectfully submit that units of absorption are not necessary as such units change depending upon the amount of light to which the material is exposed. Thus, Figure 1 shows relative absorption at different wavelengths. In support of this position, attached hereto is FIG. 8-1 from Neblette's 8th Edition. In this figure, an absorption spectra for a film is depicted. However, no units appear on the y-axis. Applicant therefore respectfully requests that this objection be withdrawn.

Claims 1-5, 7-8 and 14 were rejected under 35 USC 102(b) as being anticipated by Uyyterhoeven '488. Claims 1-5 and 7-8 have been cancelled; claim 14 has been amended to depend from newly added claim 18. Therefore, it is respectfully requested that this rejection be withdrawn.

Claims 9 and 11-13 were rejected under 35 USC 103(a) as being obvious over Uyyterhoeven '488 and EP '310 or Matsumoto '668. Claims 9 and 11-13 have been cancelled. Therefore, it is respectfully requested that this rejection be withdrawn.

Claim 10 was rejected under 35 USC 103(a) as being obvious over Uyyterhoeven '488 in view of Farid '236 or Asanuma '140. Claim 10 is cancelled. Therefore, it is respectfully requested that this rejection be withdrawn.

Claim 15-16 were rejected under 35 USC 103(a) as being obvious over Uyyterhoeven '488. Claims 15-16 ultimately depend from claim 14. Claim 14 has been amended to depend from newly added claim 18 and is now believed to be patentable. Therefore, it is respectfully requested that this rejection be withdrawn.

Claim 17 is rejected under 35 USC 103(a) as being obvious over Uyyterhoeven in view of Yip '447. Claim 17 ultimately depends from newly added claim 18, and is therefore believed to be patentable. Therefore, it is respectfully requested that this rejection be withdrawn.

Claims 1-5 and 14-17 were rejected under 35 USC 102(b) as being anticipated by Yamane '954. Claims 1-5 have been cancelled. Claims 14-17 have been amended to ultimately depend from newly added Claim 18. Therefore, it is respectfully requested that this

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rejection be withdrawn.

Claims 1-5 were rejected under 35 USC 102(e) as being anticipated by either Fukui '216 or Oka '288. Claims 1-5 have been cancelled. Therefore, it is respectfully requested that this rejection be withdrawn.

Newly added claim 18 recites an image forming method with a photothermographic sheet material. The process of claim 18 is neither taught nor suggested by any of the reference of record. Because all of the remaining claims ultimately depend from claim 18, it is respectfully submitted that all of the pending claims in the application are in condition for allowance.

Claims 1-5, 7-9 and 14-19 were provisionally rejected under the judicially created doctrine of obviousness-type double patenting as be unpatentable over claims 1-27 of copending applications '485 and '006. Claims 1-5 and 7-9 were provisionally rejected under the judicially created doctrine of obviousness-type double patenting as be unpatentable over claims 1-55 of copending application '644 in view of Farid '236.

In view of the present amendments, Applicant respectfully submits that all double patenting rejections have been overcome.

In view of the foregoing amendments and remarks, it is respectfully submitted that all of the pending claims are in condition for allowance. Early and favorable action is respectfully requested.

Respectfully submitted,



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IMAGING PROCESSES AND MATERIALS

NEBLETTE'S EIGHTH EDITION

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1982) and Sheets (1986) were derived primarily from changes in photoinitiators, where, as a result of detailed synthetic and spectroscopic studies, more effective separation of the absorption maxima in the ultraviolet and visible was achieved. The utilization of certain highly substituted biimidazoles has also given rise to more stable free radicals, which can partake in more effective color formation, rather than rapid reversal or non-color-forming side reactions.

Dylux[®] products are designed to form stable images as a result of a secondary light exposure. Images formed by photooxidation of leuco dyes can also be stabilized by several other routes, e.g., wet treatments with reducing agents such as Phenidone (Dessauer and Firmani, 1981). Manos (1968) stabilized images by thermal generation of a radical trap. Photolysis of diazonium salts in the presence of moisture was described by Cescon (1968). A higher speed system, in which mobility of ingredients was reduced as a result of a photopolymerization reaction was reported by Cescon et al. (1971a) and Dessauer and Looney (1979). Image formation, which is a diffusion reaction, is also controllable by suitable choice of matrix elements; Looney (1971) showed that certain resins which can be thermally softened will permit color formation if the photolysis and heat treatment are carried out within a relatively short time interval.

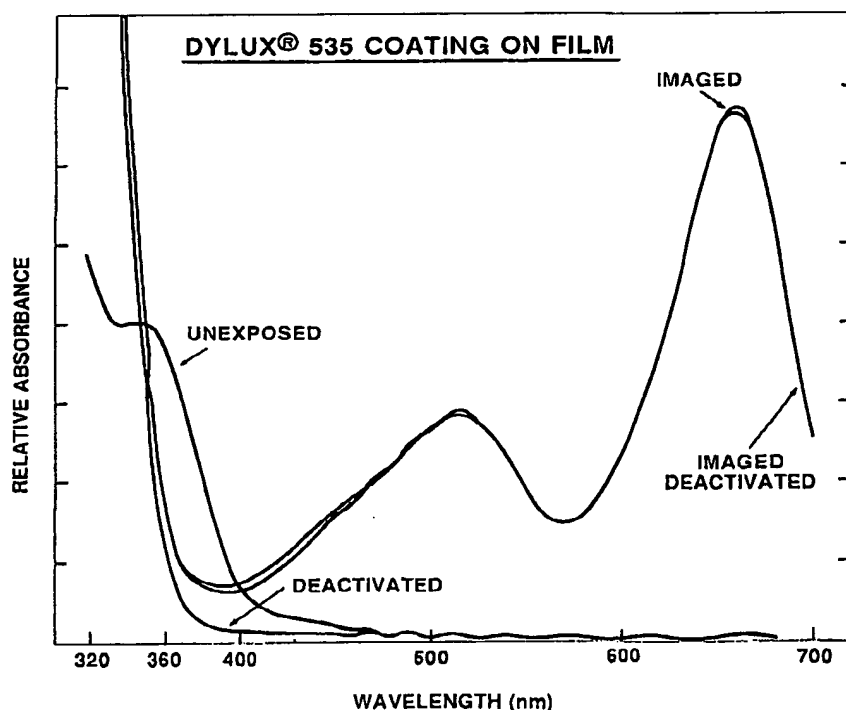


Fig. 8-1. Absorption spectra of a typical Dylux[®] film: unexposed; after exposure to ultraviolet light; after deactivation with visible light.

PHOTOGRAPHIC
NEGATIVE

DYLUX[®] PAPER

Fig. 8-2. Dual response of C formation by imagewise exposure. Positive image formation with light followed by flooding exposure.

Stabilization of Leuco [a system in which oxygen is present prior to exposure with a range, stabilize leuco dyes and certain photooxidants and image formation results in which the imagewise exposure and the image is developed by exposure.

Photothermal System systems are described. This system describes a light- and heat-activated photooxidant, i.e., a biimidazole, a cobalt(III) complex, a phenidone, and a dioxime-type chelate. The system promotes color generation and generates amines on exposure.

DIAZO PRODUCTS

Among the largest volume of products are diazo papers. This is due to the excellent reproducibility of the process and the low cost. To illustrate the size of the market, over 100,000 tons of diazo-type paper are produced annually.

Diazo technology was developed by Eastman and Bevan in Great Britain. Commercial products were developed in the 1930s.

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